

AMENDMENTS TO THE SPECIFICATION

Please replace the last paragraph on page 12 (lines 18-30) with the following replacement paragraph:

The catalysts suitable for the conversion of an alkane to a product comprising a corresponding product unsaturated carboxylic acid and being suitable for the conversion of an alkene to a product comprising a corresponding product unsaturated carboxylic acid include, for example, mixed metal oxides as disclosed in U.S. Patent No. 5,380,933. More particularly, the second catalyst component comprises a mixed metal oxide having the empirical formula



wherein A is at least one element selected from the group consisting of Mo and W, M is at least one element selected from the group consisting of V, Ce and Cr, N is at least one element selected from the group consisting of Te, Bi, Sb and Se, X is at least one element selected from the group consisting of Nb, Ta, Ti, Al, Zr, Mn, Fe, Ru, Co, Rh, Ni, Pt, Pd, B, In, As, Ge, Sn, Li, Na, K, Rb, Cs, Fr, Be, Mg, Ca, Sr, Ba, Ra, Hf, Pb, P, Pm, Eu, Gd, Dy, Ho, Er, Tm, Yb and Lu; and

wherein, when $a = 1$, $b = 0.01$ to 1.0 , $c = 0.01$ to 1.0 , $d = 0.01$ to 1.0 , e is dependent on the oxidation state of the other elements.

Please replace the split paragraph beginning on page 22, line 21, and ending on page 23, line 4, with the following replacement paragraph:

The catalysts suitable for the conversion of an alkane to a product comprising a corresponding product unsaturated carboxylic acid and being suitable for the conversion of an alkene to a product comprising a corresponding product unsaturated carboxylic acid (the second catalyst component) include, for example, mixed metal oxides as disclosed in U.S. Patent No. 5,380,933. More particularly, the second catalyst component comprises a mixed metal oxide having the empirical formula



wherein A is at least one element selected from the group consisting of Mo and W, M is at least one element selected from the group consisting of V, Ce and Cr, N is at least one element selected from the group consisting of Te, Bi, Sb and Se, X is at least one element selected from the group consisting of Nb, Ta, Ti, Al, Zr, Mn, Fe, Ru, Co, Rh, Ni, Pt, Pd, B, In, As, Ge, Sn, Li, Na, K, Rb, Cs, Fr, Be, Mg, Ca, Sr, Ba, Ra, Hf, Pb, P, Pm, Eu, Gd, Dy, Ho, Er, Tm, Yb and Lu; and

wherein, when $a = 1$, $b = 0.01$ to 1.0 , $c = 0.01$ to 1.0 , $d = 0.01$ to 1.0 , e is dependent on the oxidation state of the other elements.

Please replace the first full paragraph on page 24 (lines 6-19) with the following replacement paragraph:

The catalysts suitable for the conversion of an alkane to a product comprising a corresponding product unsaturated carboxylic acid a corresponding product alkene and unreacted alkane, and being suitable for the conversion of an alkene to a product comprising a corresponding product unsaturated carboxylic acid include, for example, mixed metal oxides as disclosed in U.S. Patent No. 5,380,933. More particularly, the second catalyst component comprises a mixed metal oxide having the empirical formula



wherein A is at least one element selected from the group consisting of Mo and W, M is at least one element selected from the group consisting of V, Ce and Cr, N is at least one element selected from the group consisting of Te, Bi, Sb and Se, X is at least one element selected from the group consisting of Nb, Ta, Ti, Al, Zr, Mn, Fe, Ru, Co, Rh, Ni, Pt, Pd, B, In, As, Ge, Sn, Li, Na, K, Rb, Cs, Fr, Be, Mg, Ca, Sr, Ba, Ra, Hf, Pb, P, Pm, Eu, Gd, Dy, Ho, Er, Tm, Yb and Lu; and

wherein, when $a = 1$, $b = 0.01$ to 1.0 , $c = 0.01$ to 1.0 , $d = 0.01$ to 1.0 , e is dependent on the oxidation state of the other elements.

Please replace the two full consecutive paragraphs on page 26 (lines 8-31) with the following two replacement paragraphs:

Moreover, this aspect of the present invention also offers the advantage that the first catalyst component can desirably include mixed metal oxides as disclosed in U.S. Patent No. 5,380,933. More particularly, the first catalyst component may comprise a mixed metal oxide having the empirical formula



wherein A is at least one element selected from the group consisting of Mo and W, M is at least one element selected from the group consisting of V, Ce and Cr, N is at least one element selected from the group consisting of Te, Bi, Sb and Se, X is at least one element selected from the group consisting of Nb, Ta, Ti, Al, Zr, Mn, Fe, Ru, Co, Rh, Ni, Pt, Pd, B, In, As, Ge, Sn, Li, Na, K, Rb, Cs, Fr, Be, Mg, Ca, Sr, Ba, Ra, Hf, Pb, P, Pm, Eu, Gd, Dy, Ho, Er, Tm, Yb and Lu; and

wherein, when $a = 1$, $b = 0.01$ to 1.0 , $c = 0.01$ to 1.0 , $d = 0.01$ to 1.0 , e is dependent on the oxidation state of the other elements. The sub-zone containing such a catalyst can be run under reaction conditions favorable to the formation of an alkene, as described above.

The second catalyst component includes mixed metal oxides as disclosed in U.S. Patent No. 5,380,933. More particularly, the second catalyst component may comprise a mixed metal oxide having the empirical formula



wherein A is at least one element selected from the group consisting of Mo and W, M is at least one element selected from the group consisting of V, Ce and Cr, N is at least one element selected from the group consisting of Te, Bi, Sb and Se, X is at least one element selected from the group consisting of Nb, Ta, Ti, Al, Zr, Mn, Fe, Ru, Co, Rh, Ni, Pt, Pd, B, In, As, Ge, Sn, Li, Na, K, Rb, Cs, Fr, Be, Mg, Ca, Sr, Ba, Ra, Hf, Pb, P, Pm, Eu, Gd, Dy, Ho, Er, Tm, Yb and Lu; and

wherein, when $a = 1$, $b = 0.01$ to 1.0 , $c = 0.01$ to 1.0 , $d = 0.01$ to 1.0 , e is dependent on the oxidation state of the other elements.